



Western
Centre for School
Mental Health

Field Testing a Retrospective Survey for the Healthy Relationships Program: Assessing Psychometrics and User Experience

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INTRODUCTION

Youth can be vulnerable to a range of negative outcomes because of their life circumstances and experiences. Vulnerable youth are disproportionately affected by dating violence (Tyler & Melander, 2012; Wekerle et al., 2009), trauma (Kramer et al., 2013), and maltreatment (Wekerle et al., 2007), as well as difficulties in interpersonal relationships (Forenza et al., 2018; Wekerle et al., 2009). While many of these youth demonstrate resilience in the face of adversity, they can still benefit from programs that provide education and skill development in areas relevant to their lives (Shpiegel, 2016).

The Healthy Relationships Program - Enhanced (HRP-E) is an 18-hour evidence-informed program created to prevent dating violence and promote healthy relationships in adolescents. It uses a small group, skills-based approach to teach social-emotional learning and prevent risk behaviours. This enhanced version was designed specifically for at-risk, vulnerable, and justice-involved youth and incorporates a trauma-informed approach and harm reduction techniques.

Even if a program is has research evidence, ongoing monitoring and evaluation are important. Organizations need to capture the impacts of programming for *their* youth to report back to different stakeholders.

When working with vulnerable populations, there is a need for program evaluation to be more practical, respectful of youths' time and effort, and considerate of their lived experiences.

Survey Development and Field Testing Process

At the Centre for School Mental Health (CSMH), we receive requests for support in evaluating the HRP-E from organizations implementing the program. To assist our partners, we developed a measure to evaluate the HRP-E. The measure was designed to be easy to implement, using a retrospective pre-post design augmented with scenario questions.

Youth who access the HRP-E and other community mental health programming (in settings such as justice and the Children's Aid Society) may have higher rates of literacy and attention challenges. Thus, it was important to make the survey as efficient and easy to understand as possible.



OBJECTIVES

Field testing is an essential step to ensure the survey runs smoothly and data can be analyzed properly. It helps to reduce repetition, adjust wording, avoid bias, and understand participants' reactions to items.

The current study encompasses the field test and corresponding revisions of the retrospective survey developed for the HRP-E. The specific objectives were to determine the survey's response patterns, psychometrics, and user experience to inform revisions.

METHOD

Participants:

- Youth between the ages of 13-22 years who completed the HRP-E
- Data from 63 youth included in the final analysis (55.6% male, 39.7% female, 1.6% Transgender and Gender Non-Conforming, 3.2% missing data)
- Average age of 16 years (SD=2)
- 13 interviews conducted with a subset of the youth who completed the HRP-E and the survey

Data collection (Mixed Methods):

- HRP-E retrospective pre-post survey (Likert-scale items, scenario and open-ended questions)
- Youth interviews about the program and the survey itself

Data Analysis:

- **Quantitative**
 - Paired-samples t-test
 - Independent-samples t-test
 - Reliability coefficients using Cronbach's alpha
- **Qualitative**
 - Inductive approach to coding interview and open-ended survey responses
- **Convergence between survey responses** (Likert-scale data, open-ended survey responses) **and interview responses**



RESULTS

Survey Psychometrics



Reliability, inter-item correlations, and validity were analyzed to inform survey revisions.

Order Effects (Survey 1 vs. Survey 2)

Two surveys were developed to counterbalance the retrospective pre and post sections. There was not a significant difference between versions.

Reliability

Cronbach's alpha values for the pre-scales ($\alpha = .944$), the post-scales ($\alpha = .964$), and the survey as a whole ($\alpha = .956$) indicated high internal consistency.

Inter-item Correlations

Items with correlation values over .70 were considered for deletion as it showed redundancy in the intended idea or construct.

Convergent Validity

Quantitative Data. Scores for the whole scale were significantly higher for the post-test responses ($M = 3.42$, $SD = .41$) than for the retrospective pre with a large effect size ($M = 2.75$, $SD = .48$), $t(62) = 10.20$, $p < .001$, $d = 1.50$, with youth reporting increased learning about topics like relationships, mental health, help-seeking, and dating violence.

Skills Application. Scenarios were used to assess the knowledge gained from the program. They required youth to consider the skills they might use in a high-risk situation.

- 1st scenario involved a fictional character in a controlling relationship. 98% of youth correctly identified the relationship as unhealthy, abusive, or controlling.
- 2nd scenario involved a character facing problems with bullying and mental health. 94% of youth correctly identified the issues.

Participants provided recommendations for whom the individuals in the scenarios could seek help, which included parents/guardians and trusted adult helpers (i.e., school guidance counsellor, teacher, therapist, psychologist).

User Experience



Youth Interviews

Participants provided information about feasibility, length, and readability, and expressed suggestions for changes. Overall, they shared that the survey was easy to complete but still felt too long and suggested some changes to certain questions/wording.

We also asked the youth about their experiences in the HRP-E. Main themes were identified related to relationships and managing situations.

- **Relationships** (such as what a healthy/unhealthy relationship looks like, warning signs of dating violence, how to break up respectfully, and friendships)

"I learned about what a healthy relationship actually looks like. For a long time, a relationship that I was in before, I thought it was healthy. And then after that program, it really helped me realize that it wasn't, and that there were a lot of red flags right from the beginning that I just didn't see because I didn't know how to spot those red flags."

- **Managing situations** using skills learned from the HRP-E (such as assertive communication; delay, negotiation, and refusal tactics; and managing stress).

"Assertive communication was the most important skill. Before the program, I really had an issue with how I would say things because the tone of my voice would sound tense or rude, not how I wanted it to...learning how to word sentences differently so that you don't hurt someone's feelings was helpful...I've used it with friends and family. Or sometimes, I'll have a conversation with someone and later on I'll think, oh, I could have said this differently, or the other person could have said that differently to get their point across better. I reflect on it more now."

DISCUSSION

Results showed that the retrospective pre-post survey is a usable and valid measure. Reducing the length was an important consideration and this field testing process allowed us to identify items that could be removed based on redundancy, floor or ceiling effects, or confusion about the meaning. Based on inter-item correlations, reliability and validity assessments, and participant comments, items were removed or revised to streamline the survey from 83 items to 46 items.

Furthermore, while there is debate in the field about how retrospective pre-post items should be presented, we found that there was no difference in our versions, suggesting that we can use the version that is easiest for youth to understand.



Results showed that:

- The survey has high internal reliability.
- A high degree of relatedness was found between the different methods of examining the knowledge and skills gained through the HRP-E (convergence).
 - Youth gained knowledge and skills around relationships, help-seeking, and mental health.
- Qualitative responses may support organizations' feedback needs with stakeholders as quotes from participants can be useful on fundraising materials and annual reports, beyond just a score difference.
- Quantitative data alone did not show the detailed knowledge and skills the youth learned from the HRP-E.

CONCLUSIONS

Through our experiences working with community organizations and youth, we have learned the following to inform future research:

- Multiple data sources can be beneficial in gaining nuanced information.
- Though there was pressure to make the survey as brief as possible, retaining mixed methods components (i.e., scenario questions) augmented the quantitative ratings.
- Although there is evidence that the survey is feasible and valid, it may not capture the nuance or sense of story the same way that is achieved through qualitative data.
- Some youths' voices are still missing from this type of survey due to literacy or cognitive challenges, and will require alternative ways to share feedback.
 - Researchers should acknowledge these potential challenges and offer alternative data collection methods such as focus groups, arts-based methods, or photovoice.